Supplementary Information:

Structural analysis of $C_8H_6^{\bullet+}$ fragment ion from quinoline using ion-mobility spectrometry/mass spectrometry

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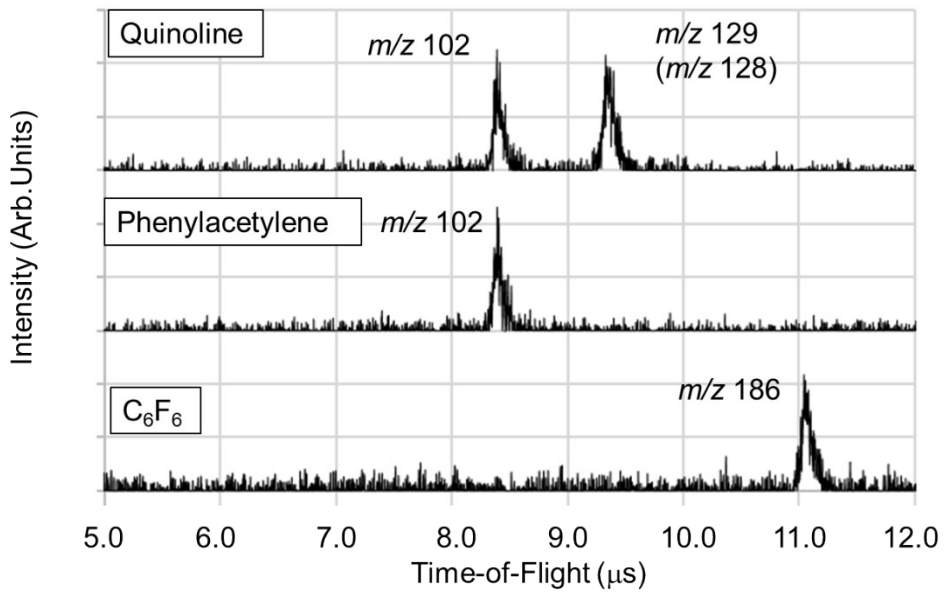
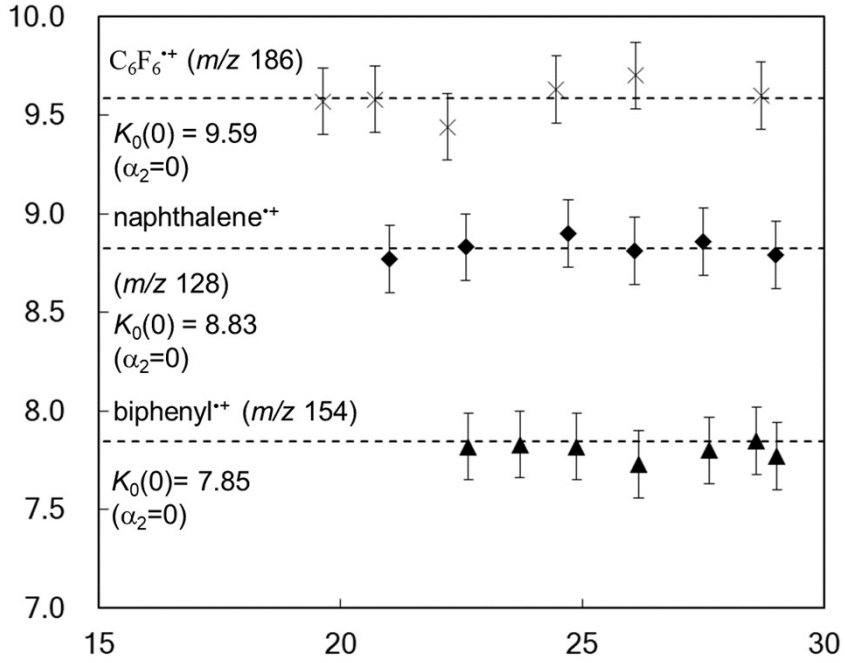


Supplementary Fig. S1: Time-of-Flight (TOF) mass spectrum of quinoline and phenylacetylene and C_6F_6.



Supplementary Fig. S2: Reduced mobilities K_0 of $C_6F_6^{\bullet+}$ (cross marks), naphthalene radical cation (closed diamonds), and biphenyl radical cation (closed squares) in the He buffer gas as a function of E/N.

Supplementary Table S1: Reduced mobilities in He of naphthalene and biphenyl ions

compound	K_0 ($cm^2 V^{-1} s^{-1}$)	$K_0(0)$ ($cm^2 V^{-1} s^{-1}$) this work
naphthalene	8.79 ± 0.07*	8.83 ± 0.17
biphenyl	7.90 ± 0.07*	7.85 ± 0.17

* Taken from C.S. Creaser *et.al.*, Anal. Chem., **72,** 2724-2729 (2000).